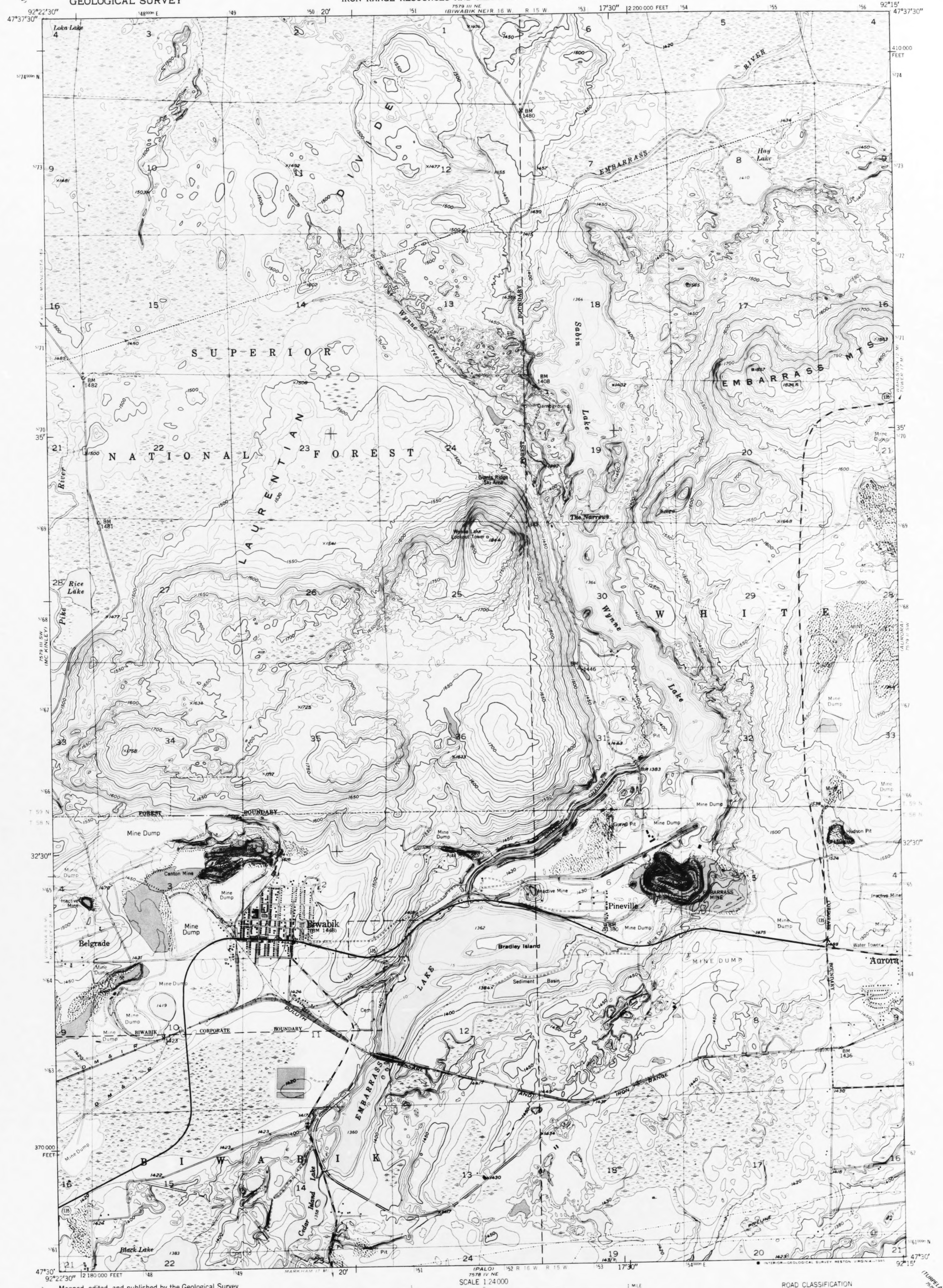
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF MINNESOTA
IRON RANGE RESOURCES AND REHABILITATION COMMISSION

BIWABIK QUADRANGLE
MINNESOTA-ST. LOUIS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1947. Field check 1950

Polyconic projection 1927 North American Datum
10,000-foot grid based on Minnesota coordinate system, north zone

1000 meter Universal Transverse Mercator grid ticks, zone 15, shown in blue

Depth curves compiled from charts furnished by Minnesota Department of Conservation

To place on the predicted North American Datum 1983 move the projection lines 6 meters north and 14 meters east as shown by dashed corner ticks

UTM GRID AND 1985 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

There may be private inholdings within the boundaries of the National or State reservations shown on this map

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

Revisions shown in purple and woodland compiled from aerial photographs taken 1981 and other source data
Partial field check by U. S. Forest Service. Map edited 1985

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
U. S. Route — State Route

BIWABIK, MINN.
47092-E3-TF-024
1950
PHOTOREVISED 1985
DMA 7579 III SE–SERIES V872